



## Let's Get Graphing

- 1 Create a graph to display the information shown in the table below. Justify your choice of graph type.

Concert Ticket Sales

Day	Number of Tickets Sold
Monday	75
Tuesday	88
Wednesday	50
Thursday	134
Friday	227

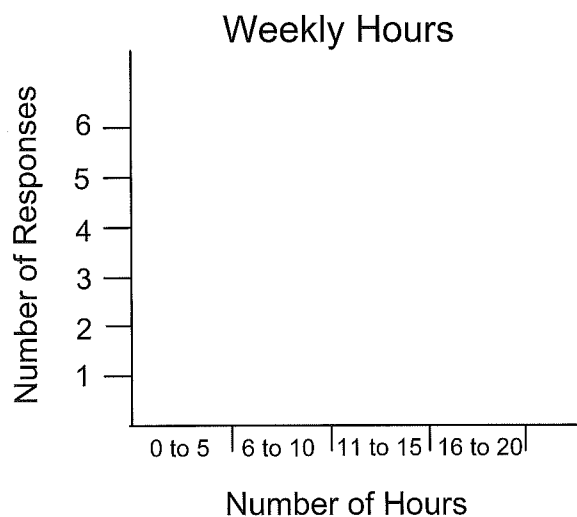
- 2 Based on the table and graph above, determine if each of the following statements is true or false:
- a) \_\_\_\_\_ More people purchased concert tickets on Friday than on Monday, Tuesday, and Wednesday combined.
  - b) \_\_\_\_\_ Approximately  $\frac{1}{8}$  of the tickets sold during these 5 days were sold on Monday.
  - c) \_\_\_\_\_ Tickets sales were steadily increasing during the week.
  - d) \_\_\_\_\_ Ticket sales on Friday account for approximately 40% of all the ticket sales during these 5 days.



## Unit 10 Lesson 4

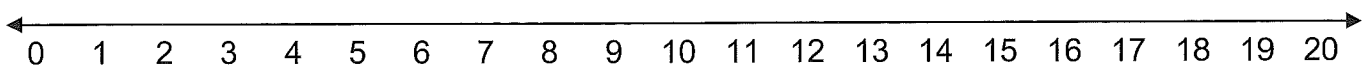
### Summer Job

- Create a histogram and a possible data list that satisfies the conditions on the **Clue Cards**.
- Answer the questions below.



### My Data List

- 1 What percent of your data fits in the 0 to 5 interval?
- 2 What percent of your data fits in the 16 to 20 interval?
- 3 What is the smallest value in My Data List?
- 4 What is the largest value in My Data List?
- 5 What is the median of My Data List?
- 6 Create a line plot of My Data List.

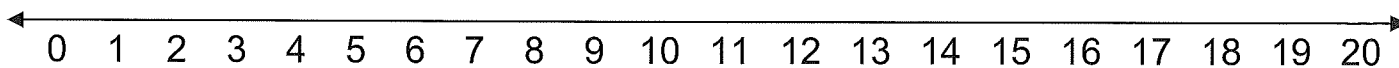




## Amy's Job

Number of hours worked:

0	2	3	3	8	8	8	9
10	11	12	15	16	16	18	18





## Unit 10 Lesson 4

### Independent Practice

Graphs illustrate how data compare. Different graphs are used for different kinds of data.

Line plots are horizontal number lines where each element is represented with an X above its value on the number line.

Bar graphs are used to show numbers of responses for different categories.

Histograms are similar to bar graphs where the bars represent data arranged in intervals.

Circle graphs show how each part relates to the whole.

Line graphs are often used to show changes over time.

Box and whisker plots show the spread of data.

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Create a graph for each table to display the information. Justify your choice of graph.

1

Colors of Chocolate Candies

Color	Percent
Green	20%
Brown	40%
Orange	20%
Red	10%
Yellow	10%

## 2 Favorite Types of Books

Genre	Number of Responses
Fiction	15
Nonfiction	10
Biography	8

## 3 Weight of Baby Panda

Week	Weight (lbs)
Week 1	2
Week 2	3
Week 3	4
Week 4	6
Week 5	8



## Unit 10 Lesson 4

4

Number of Push-Ups in  
One Minute

Number of Push-Ups	Students
0 – 10	5
11 – 20	10
21 – 30	12
31 – 40	3

5

Hours of Battery Life  
on MP3 Players

15	18	17	16
12	15	18	10
8	10	12	18
15	20	6	9



- 6 The senior class of Eastman High School votes each year to determine their graduation colors. The graduation committee decided to survey some of the seniors to determine which colors should be on the ballot.

Determine if each of the following sampling methods would provide a good representation of Eastman High School's senior class. Justify each answer.

- a) Survey every 3<sup>rd</sup> student in the cafeteria about his or her favorite color.
- b) Select a few teachers who teach senior classes and ask them to distribute color surveys to their students.
- c) Go door-to-door in the local community and ask each person about his or her favorite color.
- 7 Principal Wheatley determined that 85% of the students at Old Oaks Middle School own MP3 players. If the school has 2500 students, which of the following statements is represented by Principal Wheatley's data? Justify each answer.
- a) More than  $\frac{1}{5}$  of the students do not own an MP3 player.
- b) More than  $\frac{7}{8}$  of the students own an MP3 player.
- c) There are 375 students who do not own an MP3 player.
- d) More than 2200 students own an MP3 player.



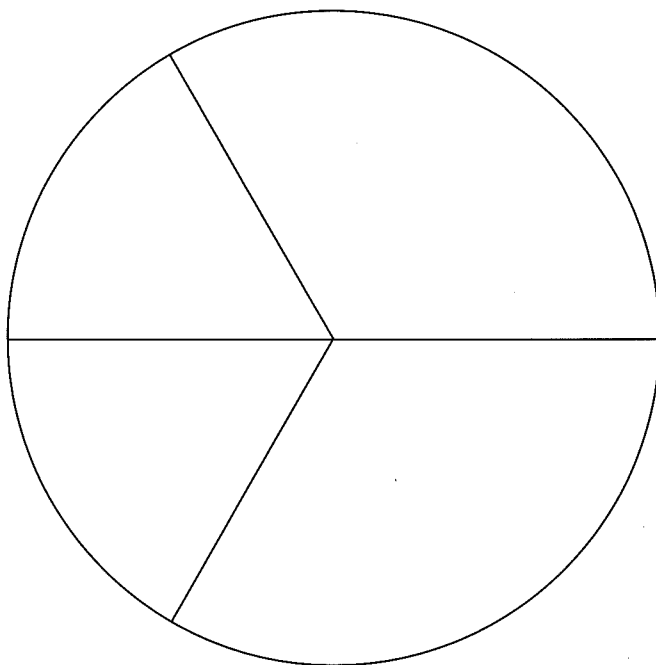
## Unit 10 Lesson 4

### Yummy in My Tummy

Eighteen students were surveyed about their favorite type of food. Their choices were: American, Chinese, Italian, Mexican, or Thai.

The circle graph represents the results of the survey. Use the clues provided to determine the placement of each category and the number of votes it received. Justify your answer.

- The same number of people voted for Italian as voted for Thai.
- The same number of people voted for Mexican as voted for Chinese.
- Twice as many people voted for Chinese as voted for Italian.



FOR TEACHER USE ONLY:

a. YES NO Student arrives at a correct solution?

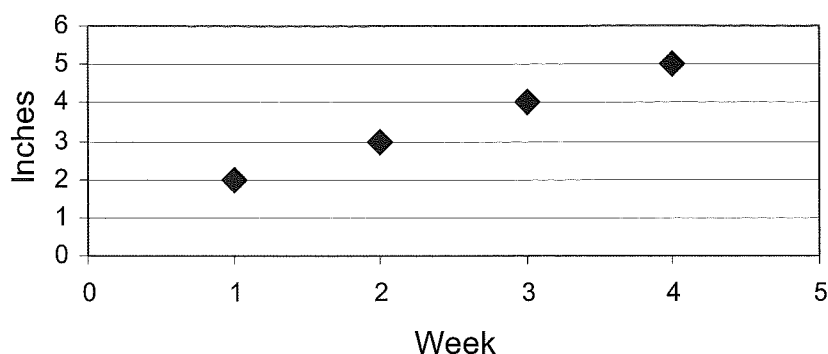
	4	3	2	1
b. Conceptual Knowledge				
c. Procedural Knowledge				
d. Communication				





- 1 The height of a plant for the past four weeks is shown below.

Plant Height



If the growth rate shown in the graph above continues, which is the best prediction of the height of the plant at the end of week 6?

- A 4 inches
  - B 5 inches
  - C 6 inches
  - D 7 inches
- 2 Brandon weighed his new puppy every week from January to March. Which type of graph would be the best representation of the puppy's growth during that time period?
- A line graph
  - B histogram
  - C circle graph
  - D bar graph



## Unit 10 Lesson 4

- 3 The table below shows the number of subscriptions to the *Greenville Gazette* newspaper for the last 5 years.

Newspaper Subscriptions	
Year	Number of Subscriptions
2001	320
2002	650
2003	980
2004	1220
2005	1005

Which statement is NOT supported by this data?

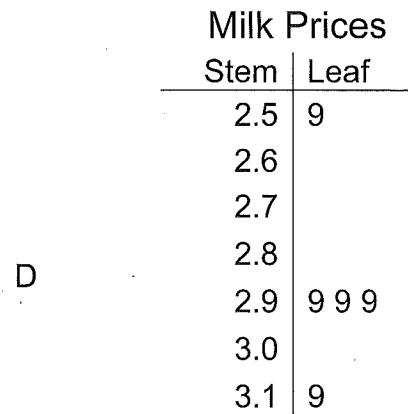
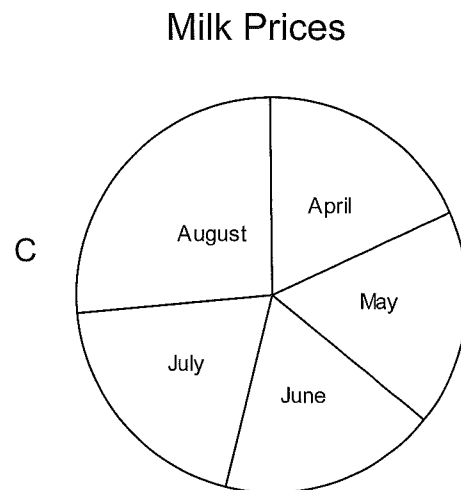
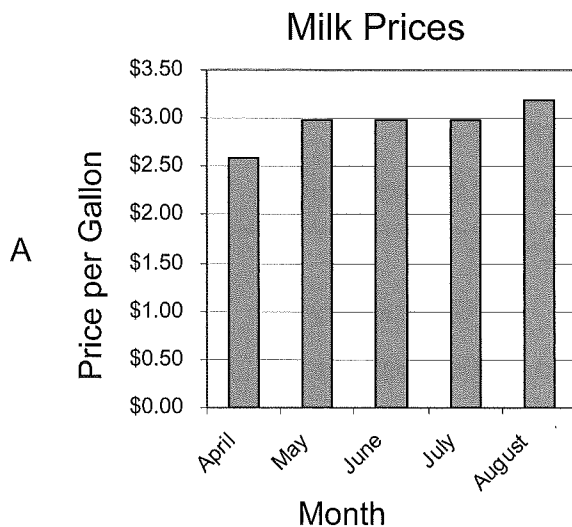
- A The number of subscriptions in 2002 was approximately double the number of subscriptions in 2001.
- B More people subscribed in 2003 than in 2001 and 2002 combined.
- C The number of subscriptions increased by 330 subscriptions each year from 2001 to 2005.
- D The number of subscriptions in 2004 was more than any other year.



- 4 The average monthly price for a gallon of milk is recorded in the table below.

Month	Price Per Gallon
April	\$2.59
May	\$2.99
June	\$3.19
July	\$2.99
August	\$2.99

Which graph best represents the data in the table?



Key: 3.0 | 8 means \$3.08